THE EFFECTS OF RISK AND BENEFIT PERCEPTIONS ON ATTITUDES OF CUSTOMERS TOWARDS B2C WEB SITES

Dr. Mustafa Emre Civelek
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• The number of Internet users is increasing rapidly every year.

• As a result, the number of people shopping on the internet is also increasing.

• But the vast majority of Internet users still do not shop online.

• Considering this situation, it is seen that there is a great potential on the internet especially in B2C field.

• In order to make use of this potential, it is necessary to determine the factors that affect the attitudes of internet users towards online shops and their hesitations against online shopping.
PROBLEM IDENTIFICATION

• The most important aspect of an electronic commerce business is its website.

• The success of the website is the most important influence that affects the success of the business.

• The most important factor that determines the success of a website is that the site is preferred by the customers among other competing sites.

• In this preference, the determining factor is the attitude of the customer.

• This attitude is the result of the shopping experience of the customer.

• As a result, the customer has a net benefit perception about the site.
PROBLEM IDENTIFICATION

• There are prejudices and perceptions about shopping on the Internet, regardless of the web site used by Internet users.

• Attitudes towards the website are directly related to the quality of the service and system that the web site provides. But it can be said that users' prejudices about shopping from the internet are influential on their attitudes towards the site.

• The aim of this research is to demonstrate this relationship and to test it statistically.

• In order to clarify the success criteria of the websites of B2C electronic commerce businesses, a conceptual model has been proposed. The proposed model is thought to contribute to electronic commerce literature.
CONCEPTUAL MODEL

![Diagram showing the conceptual model with nodes for Product Risk, Financial Risk, Attitude Toward Site, Net Benefit, Shopping Flexibility, and Product Selection, connected by arrows indicating positive and negative relationships between variables.]

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HYPOTHESES

H₁: Product Risk affects Attitude Toward Site negatively.

H₂: Financial Risk affects Attitude Toward Site negatively.

H₃: Shopping Flexibility affects Attitude Toward Site positively.

H₄: Product Selection affects Attitude Toward Site positively.

H₅: Attitude Toward Site affects Net Benefit positively.
Product Risk Perception

• Refers to the perception that the consumer already has about the product that he has not bought yet and that it is related to shopping on the internet.

• This dimension is not related to the site, but rather refers to the general perception of shopping on the internet that consumers have before shopping on any site.
Financial Risk Perception

• Refers to the general perception of the security of the consumers who are shopping on the internet *without any site specificity.*

• Generally referring to, consumers are disturbed by sharing their credit card information and personal information *on the internet.*
DIMENSIONS

Shopping Flexibility

• Refers to general perception regardless of any site.

• This perception is about the users think that they can shop on internet whenever and wherever they want.
Product Selection

- Product selection dimension refers to the general perception that users are more independent of shopping on the Internet than in any other shopping area, and that product variety is higher than in classical shops.
DIMENSIONS

Attitude toward the Site

- Refers to the intention of using the site and shopping on the site.

- As this research is based on B2C sites, attitude toward the site dimension must be understood as the customers' intention to make purchases from the site.
Net Benefit

• The net benefit is defined as the perceived benefit of the site generated by the user.

• Relates to the value judgments of the users. It is essentially the difference between the cost and the user's future benefit expectation.
• The scale developed by Chen et al. (2013) was used for **Attitude Toward Site** (Chen, Rungruengsamrit, Rajkumar, & Yen, 2013).

• The scale which was developed by Wu and Wang (2006) was used for **Net Benefit** dimension (Wu & Wang, 2006).

• The scale which was developed by Forsythe et al. (2006) was used for **product risk, financial risk, shopping flexibility and product selection** dimensions (Forsythe, Liu, Shannon, & Gardner, 2006).

• The data was collected through **online survey**. The sample of the research consists of **407 people** who purchase goods or services from e-commerce web sites.

• 54.8 % of the respondents are **female**, 40.2% of them have **university degree** and 41.5% of them are between **25-35 years old**.
RESEARCH METHODS

• In this research **quantitative** data was used and five point Likert scale survey was conducted.

• Confirmatory factor analysis (CFA) was used to analysis of the **convergent validity**. In order to assess **discriminant validity**, average variance extracted values (AVE) were calculated.

• Cronbach alpha and composite reliability (CR) values were found to analyse the **reliability** of the scales.

• **Structural equation model** which is a multi-variable statistical method was used to test the hypotheses put forward in the conceptual model.

• AMOS and SPSS statistics programs were used for analyses.
## Confirmatory Factor Analysis

<table>
<thead>
<tr>
<th>Variables</th>
<th>Items</th>
<th>Standardized Factor Loads</th>
<th>Unstandardized Factor Loads</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Risk</td>
<td>PR3.3</td>
<td>0.884</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>PR2.2</td>
<td>0.745</td>
<td>0.838</td>
</tr>
<tr>
<td>Financial Risk</td>
<td>FR8.5</td>
<td>0.736</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>FR7.4</td>
<td>1.075</td>
<td>1.435</td>
</tr>
<tr>
<td>Shopping Flexibility</td>
<td>SF12.4</td>
<td>0.707</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>SF11.3</td>
<td>0.911</td>
<td>1.050</td>
</tr>
<tr>
<td></td>
<td>SF10.2</td>
<td>0.873</td>
<td>1.100</td>
</tr>
<tr>
<td></td>
<td>SF9.1</td>
<td>0.793</td>
<td>0.974</td>
</tr>
<tr>
<td>Product Selection</td>
<td>PS14.2</td>
<td>0.782</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>PS15.3</td>
<td>0.796</td>
<td>0.917</td>
</tr>
<tr>
<td>Attitude Toward Site</td>
<td>AT53.5</td>
<td>0.683</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>AT52.4</td>
<td>0.696</td>
<td>1.102</td>
</tr>
<tr>
<td></td>
<td>AT51.3</td>
<td>0.879</td>
<td>1.209</td>
</tr>
<tr>
<td></td>
<td>AT50.2</td>
<td>0.774</td>
<td>1.177</td>
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<tr>
<td>Net Benefit</td>
<td>NB61.4</td>
<td>0.829</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>NB60.3</td>
<td>0.679</td>
<td>0.998</td>
</tr>
<tr>
<td></td>
<td>NB58.1</td>
<td>0.572</td>
<td>0.788</td>
</tr>
</tbody>
</table>

*p*<0.05 for all items
CONFIRMATORY FACTOR ANALYSIS

• After the data purification process 17 items were included in the confirmatory factor analysis.

• Confirmatory factor analysis was performed on the scales by using AMOS 23 for assessing convergent validity.

• CFA results indicated that the model was an adequate fit:
  \( \chi^2/DF = 2.805, \ CFI=0.950, \ IFI=0.950, \ RMSEA=0.067. \)

• CMIN/DF ratio is under the threshold level of 3. This shows the conformity of the initial model and acquired model. Furthermore, other fit indices exceeded their recommended thresholds.

\[ p<0.05 \text{ for all items} \]
## Construct Descriptives, Correlation and Reliability

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Product Risk</td>
<td>.817</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Financial Risk</td>
<td>.177*</td>
<td>.921</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Shopping Flexibility</td>
<td>-.254*</td>
<td>.057</td>
<td>.824</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Product Selection</td>
<td>-.315*</td>
<td>.019</td>
<td>.634*</td>
<td>(.789)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Attitude Toward Site</td>
<td>-.259*</td>
<td>-.065</td>
<td>.475*</td>
<td>.436*</td>
<td>(.762)</td>
<td></td>
</tr>
<tr>
<td>6. Net Benefit</td>
<td>-.226*</td>
<td>-.086</td>
<td>.474*</td>
<td>.405*</td>
<td>.651*</td>
<td>(.701)</td>
</tr>
<tr>
<td>Composite reliability</td>
<td>.800</td>
<td>.916</td>
<td>.894</td>
<td>.767</td>
<td>.846</td>
<td>.739</td>
</tr>
<tr>
<td>Average variance ext.</td>
<td>.668</td>
<td>.849</td>
<td>.680</td>
<td>.623</td>
<td>.581</td>
<td>.492</td>
</tr>
<tr>
<td>Cronbach α</td>
<td>.794</td>
<td>.883</td>
<td>.886</td>
<td>.764</td>
<td>.848</td>
<td>.733</td>
</tr>
</tbody>
</table>

*p < 0.05

Note: Diagonals show the square root of AVEs.
CONSTRUCT DESCRIPTIVES, CORRELATION AND RELIABILITY

- To assess discriminant validity, average variance extracted values were calculated. Results are close to or beyond the threshold level (i.e. 0.5)

- Reliability of each construct individually calculated. Composite reliability and Cronbach α values are close to or beyond the threshold level (i.e. 0.7).
RESULTS OF SEM ANALYSIS
RESULTS OF SEM ANALYSIS

- Structural model fit indices adequately indicate model fit. $\chi^2$/DF value is 2.725 and under threshold level (i.e. under 3).

- CFI and IFI values are 0.950 and 0.950 respectively. RMSEA is 0.065.
## Hypotheses Test Results

<table>
<thead>
<tr>
<th>Relationships</th>
<th>Standardized Coefficients</th>
<th>Unstandardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Risk → Attitude Toward Site</td>
<td>-0.125*</td>
<td>-0.088*</td>
</tr>
<tr>
<td>Financial Risk → Attitude Toward Site</td>
<td>-0.145*</td>
<td>-0.138*</td>
</tr>
<tr>
<td>Shopping Flexibility → Attitude Toward Site</td>
<td>0.339*</td>
<td>0.340*</td>
</tr>
<tr>
<td>Product Selection → Attitude Toward Site</td>
<td>0.240*</td>
<td>0.235*</td>
</tr>
<tr>
<td>Attitude Toward Site → Net Benefit</td>
<td>0.849*</td>
<td>0.668*</td>
</tr>
</tbody>
</table>

*p < 0.05
FINAL MODEL

- Product Risk
- Financial Risk
- Shopping Flexibility
- Product Selection

Attitude Toward Site

Net Benefit

H1(-)
H2(-)
H3(+)
H4(+)
H5(+)

Mustafa Emre Civelek
• Important finding of this research is that perception of the customers regarding internet play a role in the attitude towards B2B web sites.

• The managerial contribution of the findings for the web site managers is to provide a better understanding of the shopping experience of their customers.

• Scientific contribution is to better understand the relationship among the dimensions related to web site success.
THANKS